

DIFFUSE SURFACE INTERFERENCE POSITION SENSOR

ABSTRACT OF THE DISCLOSURE

Position of a diffusely scattering surface is detected by interfering backscattered light from 5 respective input beams which illuminate a common spot. Through polarization of the input beams and appropriate filtering, backscattered light is isolated from specularly reflected light and interfered to form a fringe pattern on a detector. The position sensor has particular 10 applicability as a push pin sensor in a hard disk servo system.